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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,907	01/17/2002	Nobuyoshi Joe Maeji	05796.0008.NPUS00	9099
27194	7590	05/13/2004	EXAMINER	
HOWREY SIMON ARNOLD & WHITE, LLP			NUTTER, NATHAN M	
BOX 34			ART UNIT	
301 RAVENSWOOD AVE.			PAPER NUMBER	
MENLO PARK, CA 94025			1711	

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/052,907

Applicant(s)

MAEJI ET AL.

Examiner

Nathan M. Nutter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 0204.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 61-167 is/are pending in the application.
- 4a) Of the above claim(s) 1-13, 61-135 and 155-167 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 136-144 is/are rejected.
- 7) ☒ Claim(s) 145-154 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group II, claims 136-154, in the Paper filed 12 April 2004 is acknowledged. The traversal is on the ground(s) that "Claim 155, from which claims 156-167 depend (i.e. all of Group III claims), now defines a process for generating the product defined by claim 136 (i.e. Group II). Applicants therefore believe that claims 136-154, and 155-167 do not define patentably distinct inventions."

This is not found persuasive because the process of the Group III claims can be employed to make a different and patentably distinct composition, such as with other known grafting materials, such as with carbohydrate and protein substrates. Further, the product of the Group II claims can be produced using conventional techniques known in the art, as shown by the references cited.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

Claims 145-154 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot properly depend from another multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 136-144 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Pasic et al, newly cited.

The reference to Pasic et al teaches essentially what is recited in the instant claims, including the particular substrates employed for the compositions. Note the Abstract and column 1 (line 44) to column 2 (line 67) which teaches the identical concept of the substrate polymers bound covalently with monomers to produce a coated substrate with external functionalities. At column 3 (line 50) to column 4 (line 62) the grafting monomers are disclosed. Note the paragraph bridging column 7 to column 8 for the size limitations, as herein recited and claimed. Finally, note the many Examples and claims of the reference.

Claims 136-144 are rejected under 35 U.S.C. 102(b) as being anticipated by Chin et al, newly cited.

The reference to Chin et al, cited of interest, teaches the manufacture of polymer blends that may incorporate graft-copolymers as herein recited and claimed. The reference further teaches the concept of functional groups attached to the graft-copolymer as being available for further reaction, as claimed. Note the Abstract and column 1 (line 23) to column 2 (line 57) wherein the patent teaches the production of coated articles wherein the metal coating plate is produced by reaction of the polymer composite with metal ions. Note the many Examples and the claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 136-144 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rolando et al, newly cited.

The reference to Rolando et al teaches essentially what is recited in the instant claims, including the particular substrates employed for the compositions, except for the particular size limitations of the product. Note the Abstract and column 2 (lines 43-60), column 4 (lines 15-63) which teaches the production of a polymer graft having external

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functionalities (useful to bind proteins), as herein claimed. Further, note the paragraph bridging column 8 to column 9.

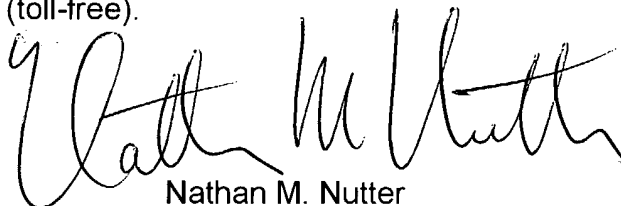
While the reference teaches essentially the same concept, the reference is silent with regard to the particular size limitations as recited in the instant claims. All other parameters being equal, the particular size limitations could only be viewed as a choice based upon particular final usage. A skilled artisan would know what the maximized size limitations would be depending upon final usage. As such, the product of the instant claims appears to be essentially met by the teachings of the reference, and the modification of size limitations would be an obvious choice to an artisan of ordinary skill, absent any showing of unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Nathan M. Nutter', is positioned above the printed name.

Nathan M. Nutter  
Primary Examiner  
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nmn

10 May 2004